

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file-reference 22171.251	FOR FURTHER ACTION see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.	
International application No. PCT/US 00/27352	International filing date (day/month/year) 04/10/2000	(Earliest) Priority Date (day/month/year) 05/10/1999
Applicant NORTEL NETWORKS LIMITED		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 3 sheets.



It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

- a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.



the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing :



contained in the international application in written form.



filed together with the international application in computer readable form.



furnished subsequently to this Authority in written form.



furnished subsequently to this Authority in computer readable form.



the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.



the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. ☐ **Certain claims were found unsearchable** (See Box I).

3. ☐ **Unity of invention is lacking** (see Box II).

4. With regard to the **title**,



the text is approved as submitted by the applicant.



the text has been established by this Authority to read as follows:

KEY EXCHANGE FOR A NETWORK ARCHITECTURE

5. With regard to the **abstract**,



the text is approved as submitted by the applicant.



the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the **drawings** to be published with the abstract is Figure No.



as suggested by the applicant.



because the applicant failed to suggest a figure.



because this figure better characterizes the invention.

2



None of the figures.

INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 00/27352

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 H04L9/08 H04L2 H04L12/28

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H04L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, INSPEC

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	YAIR FRANKEL ET AL: "SECURITY ISSUES IN A CDPD WIRELESS NETWORK" IEEE PERSONAL COMMUNICATIONS,US,IEEE COMMUNICATIONS SOCIETY, vol. 2, no. 4, 1 August 1995 (1995-08-01), pages 16-27, XP000517586 ISSN: 1070-9916	1,16,31, 45-49
A	page 20, right-hand column, line 17 -page 23, line 50	2-15, 17-30, 32-44, 50-127
A	EP 0 912 026 A (LUCENT TECHNOLOGIES INC) 28 April 1999 (1999-04-28) page 16, line 5 - line 44 page 20, line 16 -page 23, line 20 --- -/--	1-127

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

* Special categories of cited documents :

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- * & * document member of the same patent family

Date of the actual completion of the international search

17 April 2001

Date of mailing of the international search report

17/05/2001

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Meurisse, W

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, if appropriate, of the relevant passages	Relevant to claim No.
X	JACOBS S ET AL: "SECURITY OF CURRENT MOBILE IP SOLUTIONS" NOV. 3 - 5, 1997, NEW YORK, NY: IEEE, US, 3 November 1997 (1997-11-03), pages 1122-1128, XP000792591 ISBN: 0-7803-4250-X	64,70, 76,82, 98-100, 106,109, 116,120, 124
A	page 1125, left-hand column, paragraph 3 -page 1127, right-hand column, paragraph 5	1-63, 65-69, 71-75, 77-81, 83-97, 101-105, 107,108, 110-115, 117-119, 121-123, 125-127
A	--- JORDAN F ET AL: "SECURE MULTICAST COMMUNICATIONS USING A KEY DISTRIBUTION CENTER" PROCEEDINGS OF THE IFIP TC6 INTERNATIONAL CONFERENCE ON INFORMATION NETWORKS AND DATA COMMUNICATION, FUNCHAL, MADEIRA ISLAND, PORTUGAL, APR. 18 - 21, 1994, AMSTERDAM, NORTH HOLLAND, NL, vol. CONF. 5, 18 April 1994 (1994-04-18), pages 367-380, XP000593303 ISBN: 0-444-81869-3 the whole document	1-127
A	--- RICHARD E. SMITH: "Internet Cryptography" October 1997 (1997-10), ADDISON-WESLEY, USA/CANADA XP002165437 page 120 -page 121 page 200 -page 203	1-127
A	--- HARKINS, CARREL: "The Internet Key Exchange (IKE)" NETWORK WORKING GROUP RFC 2409, INTERNET ENGINEERING TASK FORCE(IETF) STANDARDS TRACK, November 1998 (1998-11), XP002165435 page 12, paragraph 5.2 -page 19, last line	1-127
X	--- MAUGHAN, SCHERTLER, SCHNEIDER, TURNER: "Network Working Group RFC 2408 Standards Track" INTERNET SECURITY ASSOCIATION AND KEY MANAGEMENT PROTOCOL (ISAKMP), November 1998 (1998-11), XP002165436	88
A	page 27, paragraph 3.4 -page 31, last line page 44, paragraph 4 -page 54, paragraph 4.6 -----	1-87, 89-127

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 00/27352

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP 0912026 A	28-04-1999	CA 2249817 A	14-04-1999
		CA 2249830 A	14-04-1999
		CA 2249831 A	14-04-1999
		CA 2249836 A	14-04-1999
		CA 2249837 A	14-04-1999
		CA 2249838 A	14-04-1999
		CA 2249839 A	14-04-1999
		CA 2249862 A	14-04-1999
		CA 2249863 A	14-04-1999
		EP 0910198 A	21-04-1999
		EP 0917320 A	19-05-1999
		EP 0917318 A	19-05-1999
		EP 0912027 A	28-04-1999
		EP 0912012 A	28-04-1999
		EP 0917328 A	19-05-1999
		EP 0918417 A	26-05-1999
		EP 0912017 A	28-04-1999
		JP 11289353 A	19-10-1999
		JP 11252183 A	17-09-1999
		JP 11275154 A	08-10-1999
		JP 11275155 A	08-10-1999
		JP 2000022758 A	21-01-2000
		JP 11275156 A	08-10-1999
		JP 11275157 A	08-10-1999
		JP 11284666 A	15-10-1999
		JP 11331276 A	30-11-1999